

IFW

PATENT



I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450

August 31, 2006  
Amba J. Ghelo 8/31/2006  
SIGNATURE DATE

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Yun Luo et al.  
Serial No. : 10/772,664  
Filing Date : February 5, 2004  
For : METHOD AND APPARATUS  
FOR CLASSIFYING IMAGE DATA  
USING CLASSIFIER GRID MODELS  
Art Unit : 2621  
Examiner : TBD  
Attorney Docket : TRW(TE)6895

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

1. Pursuant to 37 CFR §1.97 and §1.98, and in compliance with CFR §1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. Applicant(s) make no admission that the documents are prior art to the present invention.
2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a corresponding U.S. Patent is enclosed, or an English abstract, or a concise explanation of the relevance of the document is set forth on an attached sheet.

3. Pursuant to 37 CFR §1.97(b) this Statement is being filed (one must be checked):

- (a) ☐ Within three months of the filing date or date of entry into the National Stage.
- (b) ☒ Before the mailing date of a first Office Action on the merits.
- (c) ☐ After the period set forth in 37 CFR §1.97(b) but before the mailing date of either a final action or a notice of allowance or an action that otherwise closes prosecution in the application.
- 1) ☐ A certification is given below,
- 2) ☐ Enclosed is a check covering the fee (\$180.00) set forth in §1.17(p) for consideration of this Statement, or
- 3) ☐ Charge the fee set forth in 37 CFR §1.17(p) to Deposit Account No. 20-0090.
- (d) ☐ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. The required certification and fee is indicated below.
- 1) ☐ Enclosed is a check covering the fee set forth in 37 CFR §1.17(p) \$180, or
- 2) ☐ Charge the fee set forth in 37 CFR §1.17(p) to Deposit Account No. 20-0090.

4. Certification (if applicable):

- (a) ☒ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.

- (b) ☐ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the undersigned's knowledge after making reasonable inquiry no item of information contained in the Statement, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Statement.
5. The Commissioner is hereby authorized to charge any additional fees, fees underpaid, or credit any overpayment with regard to this Statement to Deposit Account No. 20-0090.
6. Concise Explanation (if needed):
- (1) ☐ Below is a Concise Statement of Relevance of enclosed non-English language document(s).

#### **U.S. PATENT DOCUMENTS**

U.S. Patent Application Pub. No. US 2003/0209893 A1

#### **OTHER DOCUMENTS**

The following documents were cited in an attached European Search Report. There is no admission that these documents are prior art publications since their publication status and/or dates are unknown.

DIMAURO, G. et al., "Numeral Recognition by Weighting Local Decisions", *Proceedings of the Seventh International Conference on Document Analysis and Recognition*, showing a copyright date of 2003, pgs. 1070-1074.

SACHA, J. P., "New Synthesis of Bayesian Network Classifiers and Cardiac SPECT Image Interpretation", *Ph.D. Dissertation*, University of Toledo, Toledo, date of publication unknown.

CHANDRAN, V., et al., "Detection of Mines in Acoustic Images Using Higher Order Spectral Features", *IEEE Journal of Oceanic Engineering*, Vol. 27, No. 3, July 2002, pgs. 610-618.

"Image Processing Toolbox, for use with Matlab", stated to be from *The Mathworks, Inc.*, pgs. 11-21 - 11-23, date unknown.

PRATT, W. K., "Digital Image Processing", stated to be from *Wiley Interscience*, pgs. 511 and 529-531, date unknown.

**OTHER DOCUMENTS**

KOERICH, A. L. et al., "A Hybrid Large Vocabulary Handwritten Word Recognition System Using Neural Networks with Hidden Markov Models", *Proceedings of the Eight International Workshop on Frontiers in Handwriting Recognition*, showing a copyright date of 2002, pgs. 99-104.

Reed, T. R. et al., "A Review of Recent Texture Segmentation and Feature Extraction Techniques", *CVGIP Image Understanding*, Vol. 57, No. 3, May 1993, pgs. 359-372.

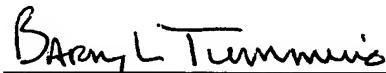
Zhang, C. et al., "A New Segmentation Technique for Classification of Moving Vehicles", *IEEE Vehicular Technology Conference*, Vol. 1, of 3., Conf. 51, having a copyright date of 2000, pgs. 323-326.

Nobuyuki, O., "A Threshold Selection Method from Gray-Level Histograms", *IEEE Transactions on Systems, Man and Cybernetics*, Vol. 9, No. 1, January 1979, pgs. 62-66.

Cortes, C., et al., "Support-Vector Networks", stated to be from *Machine Learning*, Vol. 20, pgs. 273-297.

Copy of European Search Report, dated June 27, 2006, pgs. 1-3.

Respectfully submitted,



Barry L. Tummino

Reg. No. 29,709

TAROLLI, SUNDHEIM, COVELL,  
& TUMMINO L.L.P.  
1300 East Ninth Street, Suite 1700  
Cleveland, OH 44114  
Phone: (216) 621-2234  
Fax: (216) 621-4072  
Customer No.: 26,294

|  |   |  |              |                               |              |                               |    |
|--|---|--|--------------|-------------------------------|--------------|-------------------------------|----|
| <b>MODIFIED</b><br>FORM PTO-1449<br>(REV. 6-89)  |   | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |              | ATTY DOCKET NO.: TRW(TE)6895  |              | SERIAL NO. 10/772,664         |    |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANTS<br>(Use several sheets if necessary)  |   |  |              | APPLICANT(S): Yun Luo et al.  |              |                               |    |
|  |   |  |              | FILING DATE: February 5, 2004 |              | GROUP: 2621                   |    |
| <b>U.S. PATENT DOCUMENTS</b>   |   |  |              |                               |              |                               |    |
| EXAMINER<br>INITIAL  | DOCUMENT<br>NUMBER  | DATE   | NAME         | CLASS                         | SUB<br>CLASS | FILING DATE IF<br>APPROPRIATE |    |
| A  | US-2003/0209893 A1  | Nov. 13, 2003  | Breed et al. |                               |              |                               |    |
| B  |   |  |              |                               |              |                               |    |
| C  |   |  |              |                               |              |                               |    |
| D  |   |  |              |                               |              |                               |    |
| E  |   |  |              |                               |              |                               |    |
| <b>FOREIGN PATENT DOCUMENTS</b>  |   |  |              |                               |              |                               |    |
| DOCUMENT NUMBER  |   | DATE   | COUNTRY      | CLASS                         | SUB<br>CLASS | TRANSLATION                   |    |
|  |   |  |              |                               |              | YES                           | NO |
| F  |   |  |              |                               |              |                               |    |
| G  |   |  |              |                               |              |                               |    |
| H  |   |  |              |                               |              |                               |    |
| I  |   |  |              |                               |              |                               |    |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>  |   |  |              |                               |              |                               |    |
| J  | DIMAURO, G. et al., "Numeral Recognition by Weighting Local Decisions", <i>Proceedings of the Seventh International Conference on Document Analysis and Recognition</i> , showing a copyright date of 2003, pgs. 1070-1074.   |  |              |                               |              |                               |    |
| K  | SACHA, J. P., "New Synthesis of Bayesian Network Classifiers and Cardiac SPECT Image Interpretation", <i>Ph.D. Dissertation</i> , University of Toledo, Toledo, date of publication unknown.  |  |              |                               |              |                               |    |
| L  | CHANDRAN, V., et al., "Detection of Mines in Acoustic Images Using Higher Order Spectral Features", <i>IEEE Journal of Oceanic Engineering</i> , Vol. 27, No. 3, July 2002, pgs. 610-618.   |  |              |                               |              |                               |    |
| M  | "Image Processing Toolbox, for use with Matlab", stated to be from <i>The Mathworks, Inc.</i> , pgs. 11-21 - 11-23, date unknown.   |  |              |                               |              |                               |    |
| N  | PRATT, W. K., "Digital Image Processing", stated to be from <i>Wiley Interscience</i> , pgs. 511 and 529-531, date unknown.   |  |              |                               |              |                               |    |
| O  | KOERICH, A. L. et al., "A Hybrid Large Vocabulary Handwritten Word Recognition System Using Neural Networks with Hidden Markov Models", <i>Proceedings of the Eight International Workshop on Frontiers in Handwriting Recognition</i> , showing a copyright date of 2002, pgs. 99-104. |  |              |                               |              |                               |    |
| P  | Reed, T. R. et al., "A Review of Recent Texture Segmentation and Feature Extraction Techniques", <i>CVGIP Image Understanding</i> , Vol. 57, No. 3, May 1993, pgs. 359-372.   |  |              |                               |              |                               |    |
| Q  | Zhang, C. et al., "A New Segmentation Technique for Classification of Moving Vehicles", <i>IEEE Vehicular Technology Conference</i> , Vol. 1, of 3., Conf. 51, having a copyright date of 2000, pgs. 323-326.   |  |              |                               |              |                               |    |
| R  | Nobuyuki, O., "A Threshold Selection Method from Gray-Level Histograms", <i>IEEE Transactions on Systems, Man and Cybernetics</i> , Vol. 9, No. 1, January 1979, pgs. 62-66.  |  |              |                               |              |                               |    |
| S  | Cortes, C., et al., "Support-Vector Networks", stated to be from <i>Machine Learning</i> , Vol. 20, pgs. 273-297.   |  |              |                               |              |                               |    |
| EXAMINER   |   |  |              | DATE CONSIDERED               |              |                               |    |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent applicants' attorney. |   |  |              |                               |              |                               |    |